Turkey gets Aixtron AIX 200/4 RF-S

Turkey's Bilkent University of Ankara (BUA) has purchased an Aixtron AIX 200/4 RF-S MOCVD system.

BUA's Department of Physics will install the system in a new cleanroom, where it will be used in research on AlGaN for UV photodetector applications.

"Bilkent University will be supplied with a complete system installation, comprising the planning and the establishment of the periphery equipment, including gas and H^2/N^2 purifier cabinets, the exhaust treatment system, security surveillance tools and the necessary tubing." stated Aixtron's executive VP for Compound Semiconductor Technologies, Dr. Bernd Schulte.

The MOCVD system is also equipped with the EpiR-TT in-situ monitoring tool, allowing the user to monitor growth rate, temperature, surface morphology and optical properties of the crystal layers during epitaxy.

ISO 9001:2000 for Nikko Materials

Nikko Materials USA Inc, supplier of high purity metals and wafers used in the microelectronics and communications industries, has been certified to the highest level of ISO 9001: 2000 for its quality management system.

This latest certification comes a year after achieving ISO 9002: 1994 standards.

Robert Moring, quality systems administrator at Nikko Materials USA, said: "ISO 9001:2000 was the next logical step for Nikko Materials USA after achieving 1994 certification and is a more systems-based approach to quality."

Bureau Veritas Quality International (BVQI) was chosen as Nikko Materials USA partner in the ISO certification process.

"ISO 2000 is a much more process-oriented certification and requires a great deal of commitment from a company's management team to achieve this level of quality standards," said Melissa Johnson, account manager BVQI, North America.

"The quality management system at Nikko Materials USA continues to mature and improve and overall there was clear evidence of effectiveness in meeting the company objectives."

Equipments & Materials Processing

BRIEFS

More GaN

Nippon Sanso Corp (NSC) has received orders from the National Institute of Advanced Industrial Science & Technology (AIST) and several commercial chip producers for MOCVD systems worth some ¥3,000m.

AIST, a semi-governmental research organisation, ordered NSC's SR-400 MOCVD system for use in GaN-based chip manufacturing. Feedback from the institute will be used by NSC to refine their expertise in MOCVD epitaxial growth technologies for GaN film deposition.

As part of NSC's drive to collaborate with research institutes in the field of MOCVD epitaxy, the company has provided a grant to the Nagoya Institute of Technology. This will establish a research department, where the institute's academics can pursue joint research with NSC's staff.

GE reorganises to 'leverage' expertise

Officially formed on January 1 2004, GE Advanced Materials is a newly organised GE business, consisting of its former materials businesses GE Plastics, GE Silicones, and GE Quartz.

All three former businesses have a strong track record, and the combined product portfolio now offered under the GE Advanced Materials umbrella is extensive. This ranges from quartz crucibles to grow silicone ingots; to heat-dissipating, interface-management materials to protect delicate ICs; to connector materials that can survive high-temperature IR reflow soldering; to silicone-based gels, coatings, and encapsulants; to high-performance polycarbonate and polyetherimide films; to wire coatings for plugs and direct current (DC) power cords.

GE Advanced Materials - Quartz, a producer of high-purity quartz and boron nitride for the semiconductor, electronics, fiber optic, lighting, and cosmetic sectors, is a supplier of quartz and pyrolytic boron nitride (PBN) growth vessels.

The quartz crucibles, which can be as large as 32" diameter, are used to grow Si ingots from polysilicon chunks, subsequently sliced into the wafers on which circuitry is formed. These vessels also grow Si wafers for PV cells used in producing solar-power. Normally crucibles are single-use consumables, because the crucible surface deteriorates under the heat stresses.

However, in a JD programme with a wafer manufacturer, GE has developed a protective coating for the crucible surface, extending the life and allowing for "re-charge" with polysilicon, increasing output and single-crystal yield.

PBN crucibles are used to grow GaAs and other compound semiconductor ingots for higher frequency chip applications used in the telecommunications and opto-electronics segments.

VP of marketing & sales, GE Advanced Materials - Quartz, Jeff Davis says: "GE Advanced Materials' technology starts at the beginning. If we look at semiconductor production, the wafer is born in quartz crucibles, chips are processed in quartz chambers, and our technology helps the chips reach their full potential through thermal-management materials that pull the heat out, so ICs can operate properly.

"We can leverage years of ... material experience to support this segment in a number of critical ways."